

C

REMARKS

Prior to this preliminary amendment, originally filed claims 1-45 were pending. Claims 1-25, 37, 38, 44, and 45 have been canceled. New claims 46-54 have been added. Accordingly, claims 26-36, 39-43, and 46-54 are currently pending. All of the claims as pending after entry of the above amendment are attached as Appendix A.

Support for the new claims 46-54, directed to methods for identifying compounds that modulate the activity of NIP45 or modulate an immune response, can be found in originally filed claims 44-45 and throughout the specification, in particular at, for example, page 27, line 12 through page 30, line 23. Accordingly, no new matter has been added.

Respectfully submitted,



Megan E. Williams
Registration No. 43,270
Agent for Applicants

LAHIVE & COCKFIELD, LLP
28 State Street
Boston, MA 02109
Tel. (617) 227-7400
Dated: November 16, 1998

09192611-111698

APPENDIX A

26. An isolated NIP45 protein or a biologically active portion thereof.
27. An isolated protein which comprises an amino acid sequence at least 60 % homologous to the amino acid sequence of SEQ ID NO: 2 and interacts with the Rel Homology Domain of an NF-AT family protein.
28. The isolated protein of claim 27, which is at least 70% homologous to the amino acid sequence of SEQ ID NO: 2.
29. The isolated protein of claim 27, which is at least 80% homologous to the amino acid sequence of SEQ ID NO: 2.
30. The isolated protein of claim 27, which is at least 90% homologous to the amino acid sequence of SEQ ID NO: 2.
31. A fusion protein comprising a NIP45 polypeptide operatively linked to a non-NIP45 polypeptide.
32. An antigenic peptide of NIP45 comprising at least 8 amino acid residues of the amino acid sequence shown in SEQ ID NO: 2, the peptide comprising an epitope of NIP45 such that an antibody raised against the peptide forms a specific immune complex with NIP45.
33. An antibody that specifically binds NIP45 protein.
34. The antibody of claim 33, which is a monoclonal antibody.
35. The antibody of claim 34, which is coupled to a detectable substance.
36. A pharmaceutical composition comprising the antibody of claim 34 and a pharmaceutically acceptable carrier.

39. A method for identifying a compound that modulates an interaction between NIP45 and an NF-AT family protein, comprising:

a) combining:

(i) NIP45, or an NF-AT-interacting portion thereof; and

(ii) an NF-AT family protein, or a NIP45-interacting portion thereof;

in the presence and absence of a test compound;

b) determining the degree of interaction between (i) and (ii) in the presence and absence of the test compound; and

c) identifying an agent that modulates an interaction between NIP45 and an NF-AT family protein.

40. The method of claim 39, wherein the NIP45-interacting portion of the NF-AT family protein comprises the Rel Homology Domain of the NF-AT family protein.

41. The method of claim 39, wherein the degree of interaction between (i) and (ii) is determined by labeling (i) or (ii) with a detectable substance, isolating non-labeled (i) or (ii) and quantitating the amount of labeled (i) or (ii) that has become associated with non-labeled (i) or (ii).

42. The method of claim 39, wherein the test compound increases the degree of interaction between (i) and (ii), as compared to the degree of interaction in the absence of the test compound, and the test compound is identified as an agent that stimulates an interaction between NIP45 and an NF-AT family protein.

43. The method of claim 39, wherein the test compound decreases the degree of interaction between (i) and (ii), as compared to the degree of interaction in the absence of the test compound, and the test compound is identified as an agent that inhibits an interaction between NIP45 and an NF-AT family protein.

46. A method for identifying a compound that modulates the activity of NIP45, comprising

providing a indicator composition comprising NIP45 activity;

contacting the indicator composition with a test compound; and